

LONG ISLAND BIOLOGICAL ASSOCIATION
COLD SPRING HARBOR, NEW YORK

BIOLOGICAL LABORATORY

January 21, 1956

Dr. Joshua Lederberg
Genetics Dept.
U. Wisconsin
Madison, Wis.

Dear Josh,

I'm enclosing a manuscript dealing with work on the mutable strain. Demerec has suggested sending it to PNAS. As you will see its scope is quite modest and deals only with the location of Mut and one locus it affects. I think, however, that the point made is important. I'd like your opinion on this. I have other data dealing with 1) effects on other loci and 2) environmental effects (C_2) on Mut action. These, I feel, are not complete enough, however, and could well be reserved for a subsequent report.

I hope you will be able to read the paper over and criticize appropriately. I have failed to comment, in the paper, on the fact that the segregation ratios deviate consistently from those obtained from 58-161 x W677 for example. In 58-278 x W677 there is a persistent bias toward F_2 markers. This may be due to the inclusion of prototrophic reversions of 58-278, although I have never been able to obtain same on control plates. The fact that the F_2 carries a different selective marker (Pa- rather than M-) seemed to me sufficient reason to expect somewhat different values that it was unnecessary to make a special point of this.

I spent some time this fall getting McClintock's picture more clearly in mind, and now feel that any comparison of the two systems (or attempt to contrast) would not be fruitful, without a good deal of additional work, if then. This includes the experiment I wrote to Esther about. McClintock has situations where mutations occur backward and forward at a given Ds-like site, without apparent movement of the Ds-like factor; so that a demonstration of enhanced mutability both from Mal- to Mal $^+$ and the reverse would indicate no general dissimilarity of the coli and maize systems. I did, however, obtain lambda-2 from Norton, and will probably get around to the experiment soon.

I have reported some of these data to Detrick and will have to acknowledge it and clear with them. The paper is, of course, also a Wisconsin contribution, and I wish you would indicate the manner in which this should be indicated, including authorship.

Sincerely,

Dave

P.D.Skaar